

General

Title

Assessment of chronic illness care: average score for the "Community Linkages" subscale on the Assessment of Chronic Illness Care (ACIC) Survey.

Source(s)

MacColl Center for Health Care Innovation. Assessment of chronic illness care. Version 3.5. Seattle (WA): MacColl Center for Health Care Innovation; 2000. 11 p.

Measure Domain

Primary Measure Domain

Clinical Quality Measures: Structure

Secondary Measure Domain

Does not apply to this measure

Brief Abstract

Description

This measure is used to assess the average score for the "Community Linkages" subscale on the Assessment of Chronic Illness Care (ACIC) Survey, for care provided to all patients with one or more chronic conditions.

Respondents (practice teams, health plan representatives) rate the degree to which each of the following components are being implemented within their system for care provided to all patients with one or more chronic conditions, using a scale ranging from 1 (not at all) to 11 (fully).

- Linking Patients to Outside Resources
- Partnerships with Community Organizations
- Regional Health Plans

The ACIC is organized such that the highest "score" (an "11") on any individual item, subscale, or the overall score (an average of the seven ACIC subscale scores) indicates optimal support for chronic illness. The lowest possible score on any given item or subscale is a "0", which corresponds to limited support for

chronic illness care. The interpretation guidelines are as follows:

- Between "0" and "2" = limited support for chronic illness care
- Between "3" and "5" = basic support for chronic illness care
- Between "6" and "8" = reasonably good support for chronic illness care
- Between "9" and "11" = fully developed chronic illness care

Note:

The [ACIC](#) provides subscale scores corresponding to each of the Chronic Care Model elements, as well as an overall score. Scores for each section are obtained by summing the values for all items within a section and dividing by the number of items within that section. The overall score is derived by summing the average scores of each section and dividing by the number of sections administered. Divide the overall score (sum of the average subscale scores) by 7 (the number of subscales) to obtain the average overall score.

This measure summary is based on Version 3.5 of the survey instrument. Another version of the survey (Version 3.0) is available from the [Improving Chronic Illness Care Web site](#) .

Rationale

The prevalence of individuals with chronic illness is growing at an astonishing rate because of the rapid aging of the population and the greater longevity of individuals with chronic illness (U.S. Department of Health and Human Services [DHHS], 2000). This growth has taxed health-care systems and revealed deficiencies in the organization and delivery of care to patients with chronic illness (Centers for Disease Control and Prevention [CDC], 1997; "Hypertension," 1998; Desai, Zhang, & Hennessy, 1999). There is a growing literature, however, describing effective interventions that improve systems of care in which persons with chronic illness are treated (McCulloch et al., 2000; Lorig et al., 1999; Weinberger et al., 1989; Weinberger et al., 1991; Von Korff et al., 1997; Wagner, Austin, & Von Korff, "Improving outcomes," 1996; Wagner, Austin, & Von Korff, "Organizing care," 1996). This literature strongly suggests that changing processes and outcomes in chronic illness requires multicomponent interventions that change the prevailing clinical system of care (Wagner, Austin, & Von Korff, "Improving outcomes," 1996; Wagner, Austin, & Von Korff, "Organizing care," 1996; Wagner et al., 1999).

The Assessment of Chronic Illness Care (ACIC) was developed to help organizational teams identify areas for improvement in their care for chronic illnesses, and to evaluate the level and nature of improvements made in their system (Bonomi et al., 2000). The ACIC is based on six areas of system change suggested by the Chronic Care Model (CCM) that have been shown to influence quality of care—linkages to community resources, self-management support, decision support, delivery system design, clinical information systems, and organization of the health system—and promising interventions within these areas associated with better outcomes (Wagner, Austin, & Von Korff, "Improving outcomes," 1996; Wagner, Austin, & Von Korff, "Organizing care," 1996; Wagner et al., 1999).

Evidence for Rationale

Bonomi AE, Glasgow R, Wagner EH, Davis C, Sandhu N. Assessment of chronic illness care: how well does your organization provide care for chronic illness? [paper presentation]. Seattle (WA): Institute for Healthcare Improvement National Congress; 2000 Jun.

Bonomi AE, Wagner EH, Glasgow RE, VonKorff M. Assessment of chronic illness care (ACIC): a practical tool to measure quality improvement. *Health Serv Res.* 2002 Jun;37(3):791-820. [PubMed](#)

Centers for Disease Control and Prevention (CDC). Resources and priorities for chronic disease prevention and control, 1994. *MMWR Morb Mortal Wkly Rep.* 1997 Apr 4;46(13):286-7. [PubMed](#)

Desai MM, Zhang P, Hennessy CH. Surveillance for morbidity and mortality among older adults--United States, 1995-1996. *Child Life Focus.* 1999 Dec 17;48(8):7-25. [PubMed](#)

Hypertension and managed care. Based on a presentation by Robert P. Jacobs, MD, MBA. Am J Manag Care. 1998 Dec;4(12 Suppl):S749-52; discussion S753-6. [PubMed](#)

Lorig KR, Sobel DS, Stewart AL, Brown BW Jr, Bandura A, Ritter P, Gonzalez VM, Laurent DD, Holman HR. Evidence suggesting that a chronic disease self-management program can improve health status while reducing hospitalization: a randomized trial. Med Care. 1999 Jan;37(1):5-14. [PubMed](#)

McCulloch DK, Price MJ, Hindmarsh M, Wagner EH. Improvement in diabetes care using an integrated population-based approach in a primary care setting. Dis Manage. 2000;3(2):75-82.

U.S. Department of Health and Human Services (DHHS). Healthy People 2010: understanding and improving health. Conference ed. Washington (DC): U.S. Department of Health and Human Services (DHHS); 2000 Jan.

Von Korff M, Gruman J, Schaefer J, Curry SJ, Wagner EH. Collaborative management of chronic illness. Ann Intern Med. 1997 Dec 15;127(12):1097-102. [PubMed](#)

Wagner EH, Austin BT, Von Korff M. Improving outcomes in chronic illness. Manag Care Q. 1996;4(2):12-25. [PubMed](#)

Wagner EH, Austin BT, Von Korff M. Organizing care for patients with chronic illness. Milbank Q. 1996;74(4):511-44. [121 references] [PubMed](#)

Wagner EH, Davis C, Schaefer J, Von Korff M, Austin B. A survey of leading chronic disease management programs: are they consistent with the literature?. Manag Care Q. 1999;7(3):56-66. [PubMed](#)

Weinberger M, Tierney WM, Booher P, Katz BP. Can the provision of information to patients with osteoarthritis improve functional status? A randomized, controlled trial. Arthritis Rheum. 1989 Dec;32(12):1577-83. [PubMed](#)

Weinberger M, Tierney WM, Booher P, Katz BP. The impact of increased contact on psychosocial outcomes in patients with osteoarthritis: a randomized, controlled trial. J Rheumatol. 1991 Jun;18(6):849-54. [PubMed](#)

Primary Health Components

Chronic illness; community linkages

Denominator Description

Number of items within the "Community Linkages" subscale on the Assessment of Chronic Illness Care (ACIC) Survey

Numerator Description

The sum of respondents' ratings on the "Community Linkages" items on the Assessment of Chronic Illness Care (ACIC) Survey

Evidence Supporting the Measure

Type of Evidence Supporting the Criterion of Quality for the Measure

A formal consensus procedure, involving experts in relevant clinical, methodological, public health and organizational sciences

One or more research studies published in a National Library of Medicine (NLM) indexed, peer-reviewed journal

Additional Information Supporting Need for the Measure

Unspecified

Extent of Measure Testing

Data Sources

(1) Pre-post, self-report Assessment of Chronic Illness Care (ACIC) data from organizational teams enrolled in 13-month quality-improvement collaboratives focused on care for chronic illness; (2) independent faculty ratings of team progress at the end of collaborative.

Study Design

Teams completed the ACIC at the beginning and end of the collaborative using a consensus format that produced average ratings of their system's approach to delivering care for the targeted chronic condition. Average ACIC subscale scores (ranging from 0 to 11, with 11 representing optimal care) for teams across all four collaboratives were obtained to indicate how teams rated their care for chronic illness before beginning improvement work. Paired t-tests were used to evaluate the sensitivity of the ACIC to detect system improvements for teams in two (of four) collaboratives focused on care for diabetes and congestive heart failure (CHF). Pearson correlations between the ACIC subscale scores and a faculty rating of team performance were also obtained.

Results

Average baseline scores across all teams enrolled at the beginning of the collaboratives ranged from 4.36 (information systems) to 6.42 (organization of care), indicating basic to good care for chronic illness. All six ACIC subscale scores were responsive to system improvements diabetes and CHF teams made over the course of the collaboratives. The most substantial improvements were seen in decision support, delivery system design, and information systems. CHF teams had particularly high scores in self-management support at the completion of the collaborative. Pearson correlations between the ACIC subscales and the faculty rating ranged from .28 to .52.

Refer to *Assessment of Chronic Illness Care (ACIC): A Practical Tool to Measure Quality Improvement* for additional information.

Evidence for Extent of Measure Testing

Bonomi AE, Wagner EH, Glasgow RE, VonKorff M. Assessment of chronic illness care (ACIC): a practical tool to measure quality improvement. *Health Serv Res.* 2002 Jun;37(3):791-820. [PubMed](#)

State of Use of the Measure

State of Use

Current routine use

Current Use

not defined yet

Application of the Measure in its Current Use

Measurement Setting

Ambulatory/Office-based Care

Hospital Inpatient

Hospital Outpatient

Managed Care Plans

Professionals Involved in Delivery of Health Services

not defined yet

Least Aggregated Level of Services Delivery Addressed

Clinical Practice or Public Health Sites

Statement of Acceptable Minimum Sample Size

Does not apply to this measure

Target Population Age

Does not apply to this measure

Target Population Gender

Does not apply to this measure

National Strategy for Quality Improvement in Health Care

National Quality Strategy Aim

Better Care

National Quality Strategy Priority

Institute of Medicine (IOM) National Health Care Quality

Report Categories

IOM Care Need

Not within an IOM Care Need

IOM Domain

Not within an IOM Domain

Data Collection for the Measure

Case Finding Period

Unspecified

Denominator Sampling Frame

Professionals/Staff

Denominator (Index) Event or Characteristic

Health Professional Characteristic

Denominator Time Window

not defined yet

Denominator Inclusions/Exclusions

Inclusions

Number of items within the "Community Linkages" subscale on the Assessment of Chronic Illness Care (ACIC) Survey

Exclusions

Unspecified

Exclusions/Exceptions

not defined yet

Numerator Inclusions/Exclusions

Inclusions

The sum of respondents' ratings on the "Community Linkages" items on the Assessment of Chronic Illness Care (ACIC) Survey

Exclusions

Unspecified

Numerator Search Strategy

Fixed time period or point in time

Data Source

Health professional survey

Type of Health State

Does not apply to this measure

Instruments Used and/or Associated with the Measure

Assessment of Chronic Illness Care (ACIC) Version 3.5

Computation of the Measure

Measure Specifies Disaggregation

Does not apply to this measure

Scoring

Composite/Scale

Mean/Median

Interpretation of Score

Desired value is a higher score

Allowance for Patient or Population Factors

not defined yet

Standard of Comparison

not defined yet

Identifying Information

Original Title

Community linkages.

Measure Collection Name

Assessment of Chronic Illness Care (ACIC) Survey

Submitter

The MacColl Center for Health Care Innovation - Nonprofit Research Organization

Developer

The MacColl Center for Health Care Innovation - Nonprofit Research Organization

Funding Source(s)

The MacColl Center for Health Care Innovation (a non-proprietary, public-interest research center within Group Health Cooperative, a nonprofit health system based in Seattle)

Composition of the Group that Developed the Measure

Unspecified

Financial Disclosures/Other Potential Conflicts of Interest

None

Adaptation

This measure was not adapted from another source.

Date of Most Current Version in NQMC

2000 Jan

Measure Maintenance

None

Date of Next Anticipated Revision

None

Measure Status

This is the current release of the measure.

The measure developer reaffirmed the currency of this measure in May 2016.

Measure Availability

Source available from the [Improving Chronic Illness Care Web site](#) .

For more information, contact the MacColl Center for Health Care Innovation at 1730 Minor Avenue, Suite 1600, Seattle, WA 98101; E-mail: info@improvingchroniccare.org; Web site: maccollcenter.org

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NQMC Status

This NQMC summary was completed by ECRI Institute on April 23, 2015. The information was verified by the measure developer on June 17, 2015.

The information was reaffirmed by the measure developer on May 23, 2016.

Copyright Statement

This NQMC summary is based on the original measure, which is subject to the measure developer's copyright restrictions.

Individuals interested in using the Assessment of Chronic Illness Care (ACIC) in non-commercial quality improvement work, personal, or non-profit settings are free to do so. Visit the [Improving Chronic Illness Care Web site](#) for more information.

Production

Source(s)

MacColl Center for Health Care Innovation. Assessment of chronic illness care. Version 3.5. Seattle (WA): MacColl Center for Health Care Innovation; 2000. 11 p.

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